



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for January 9, 2020

One Winter Street, Boston, MA, 1:00 p.m.

Minutes approved _____

Members in Attendance:

Vandana Rao	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Anne Carroll	Designee, Department of Conservation and Recreation (DCR)
Duane LeVangie	Designee, Department of Environmental Protection (MassDEP)
Hotze Wijnja	Designee, Department of Agricultural Resources (DAR)
Michelle Craddock	Designee, Department of Fish and Game (DFG)
Thomas Cambareri	Public Member
Vincent Ragucci	Public Member
Kenneth Weismantel	Public Member
Samantha Woods	Public Member

Members Absent

Linda Balzotti	Designee, Department of Housing and Community Development (DHCD)
Marcela Molina	Public Member
Todd Callaghan	Designee, Massachusetts Office of Coastal Zone Management (CZM)

Others in Attendance:

Marilyn McCrory	DCR
Joy Duperault	DCR
Jen Pederson	Massachusetts Water Works Association
Gabby Queenan	Massachusetts Rivers Alliance
Jennifer Sulla	EEA
Sara Cohen	DCR
Katie Ronan	Massachusetts Water Resources Authority
Andreae Downs	Wastewater Advisory Committee
Lexi Dewey	Water Supply Citizens' Advisory Committee
Erin Graham	DCR
Kate Bentsen	DFG/Division of Ecological Restoration
Viki Zoltay	DCR
Vanessa Curran	DCR

Rao called the meeting to order at 1:11 p.m.

Agenda Item #1: Executive Director's Report

Rao provided an update on commission staff's work with the Northeast Regional Climate Center (NRCC) at Cornell University on development of a drought dashboard. She explained that the dashboard would provide a single portal for communicating information on drought and for allowing stakeholders to report back on observed drought conditions. She explained that the dashboard would use the existing NRCC template for communicating drought information, which is consistent across the country, but would be tailored to reflect the drought metrics and levels outlined in the [Massachusetts Drought Management Plan](#).

Rao also provided an update on the Water Conservation toolkit, a website being developed by WRC and EEA staff with the help of a consultant. She noted that agency staff are guiding content and the consultant is designing the web pages to work within state design standards.

Rao invited updates from commission members. Cambareri reported high water levels on Cape Cod. He described efforts to control flooding while balancing resource management needs of resources such as herring runs. He requested thoughts on how to achieve this balance.

Agenda Item #1: Update: Hydrologic Conditions

Zoltay provided an update on the hydrologic conditions for December 2019. She reported above-normal precipitation, much in the form of snow, with some record high amounts, particularly on Cape Cod, where deviation from the average was 4.7 inches for the month. She added that temperatures were about average for the month, but the daily temperature variation was quite wide, ranging from 15 to 63 degrees Fahrenheit. Streamflows were also significantly above normal, with some record highs and some minor flooding. Groundwater levels were also above normal, with the exception of one well in the Connecticut River Valley region, which is slowly recharging from an earlier deficit. Lakes and impoundments are at the top of their range for typical December levels. No drought is anticipated through March 2020.

There was some discussion of changes to the format and content of the monthly Hydrologic Conditions Report. LeVangie noted that some precipitation stations reported no measurements. Zoltay explained that a new map had been generated showing more stations than had been shown in previous reports. Cambareri commented favorably on the new statistic for the median of all wells.

Agenda Item #3: Vote on the Minutes of September 2019

Rao invited a motion to approve the meeting minutes for September 12, 2019. She noted one edit to the draft minutes on page 7.

V O T E	A motion was made by Weismantel with a second by Ragucci to approve the meeting minutes for September 12, 2019.
	A second motion was made by Weismantel with a second by Ragucci to approve the meeting minutes for September 12, 2019, as amended.
	The vote to approve was unanimous of those present with one abstention (Woods).

Agenda Item #4: Vote: WRC Annual Report, FY2019

Rao reviewed the commission's obligation, by statute, to submit an annual report to the Massachusetts Legislature. She noted substantial accomplishments by the commission in the last year. Carroll pointed out two edits made to the draft annual report discussed at the December 2019 commission meeting. Rao invited comments.

There was some discussion of the emergence of per- and polyfluoroalkyl substances (PFAS) as contaminants of concern in drinking water. Cambareri noted that these contaminants affect both water quality and quantity, since poor water quality results in reduced water availability. Ragucci noted that Andover and North Reading had detected concerning levels of PFAS in drinking water. LeVangie added that MassDEP may issue an Emergency Declaration for Reading, and Rao

explained that communities operating under an Emergency Declaration are exempt from requirements of the Interbasin Transfer Act for a period of six months within a calendar year.

LeVangie asked how the report is distributed to the Legislature. Rao explained that EEA legislative staff handle distribution.

Rao invited a motion to approve the report.

V	A motion was made by Weismantel with a second by Ragucci to approve the Water
O	Resources Commission Annual Report for Fiscal Year 2019.
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E	The vote to approve was unanimous of those present.

Agenda Item #5: Presentation: Proposed Request from the Town of Burlington for an Interbasin Transfer of Water from the MWRA System and Request for Additional Information

Rao explained that the Water Resources Commission uses the final Environmental Impact Report (EIR), submitted to the Massachusetts Environmental Policy Act (MEPA) Office, as the application for an interbasin transfer. The commission provides comments on the draft EIR to ensure that all the information needed to evaluate the project under the Interbasin Transfer Act (ITA) is included in the final MEPA filing. The MEPA process must be complete before the ITA review process begins. She explained that the purpose of today's overview is to provide a snapshot of Burlington's proposed transfer and that an evaluation of the project is not needed at this point.

Carroll provided an overview of facts relevant to Burlington's application for an interbasin transfer of water, including its land area in three river basins (Shawsheen, Ipswich, and Boston Harbor basins) and the location of its water supply sources in the Shawsheen River Basin. She explained that Burlington is seeking to purchase up to 6.5 mgd of water from the Massachusetts Water Resources Authority (MWRA), whose sources are in the Chicopee and Nashua River basins, to supplement Burlington's local sources and provide redundancy. She explained that contamination has compromised some of Burlington's groundwater sources. She reviewed actions the town has taken to address reductions in its pumping capacity, including implementing outdoor watering restrictions and conducting an analysis of alternatives for supplementing its water supply. She outlined the town's recommended alternative, which includes taking three of its wells and treatment plant offline and purchasing some water from the MWRA.

Carroll outlined the additional information that WRC staff will be requesting from the applicant in the commission's comment letter on the DEIR. This information pertains to the seven criteria for evaluating transfers, as outlined in the Interbasin Transfer Act and its regulations. The requested information pertains to criteria #3 (Water Conservation) and #4 (Forestry Management Program). She noted the timeline for comments and the MEPA decision on the DEIR, which is expected on January 17, 2020.

Comments, questions, and responses:

Cambareri asked if the alternative analysis considered treatment of the contaminants found in the wellfield. Carroll explained that treatment was considered, but the town's remaining wells would not provide sufficient capacity. There was also concern about emerging contaminants of concern that could require additional treatment in the future. Cambareri requested that WRC staff look at treatment. He pointed out the importance of maintaining sustainability within each

watershed and suggested that Burlington consider growth limits to reduce demand. LeVangie noted that Burlington's water use has generally remained flat. Ragucci asked how projected future development fits into their request. Carroll responded that WRC staff, as well as a consultant, had completed water needs forecasts for Burlington. Water use is not expected to change dramatically.

In response to a question from Cambareri, Carroll explained that the town plans to keep the Mill Pond Reservoir as a water supply source to provide redundancy. Woods asked if the reservoir has required streamflow releases. LeVangie explained that the reservoir is not physically connected to the Ipswich River. It was originally constructed over an existing stream and functions more like a holding tank.

Queenan asked if other communities have water supply sources in the Shawsheen River Basin. LeVangie responded that Burlington may be the only public water supplier with a water withdrawal permit in the basin.

In response to a question from Pederson about the timeline for this request, Rao reviewed the timeline for comments and the decision by the Secretary of Energy and Environmental Affairs. She explained that if MEPA accepts the DEIR as the final EIR, then the applicant will submit the additional information requested by WRC staff in the form of a letter.

Woods requested clarification of the additional information requested and asked how well the town complies with the performance standards for water loss control and residential consumption. Carroll explained that staff will request more details on the town's conservation program and noted that the town complied with the performance standards.

There was some discussion of the town's plan for its groundwater sources. Ronan explained that the long-term goal is to take all of Burlington's wells offline, but this will be done in two phases. She noted that Burlington is now operating under a MassDEP Emergency Declaration and is currently purchasing water from the MWRA.

**Agenda Item #6: Presentation: NFIP Flood Insurance in Massachusetts —
Key to Recovery — and Briefing on FEMA request to states regarding NFIP compliance**

Rao explained that the Water Resources Commission had been delegated in 1978 by a governor's executive order as the entity responsible for the National Flood Insurance Program (NFIP). She introduced Joy Duperault, the State NFIP Coordinator and Deputy Hazard Mitigation Officer in the Flood Hazard Management Program at the Massachusetts Department of Conservation and Recreation.

Duperault explained that DCR's Flood Hazard Management Program serves as the link between the Federal Emergency Management Agency (FEMA), which administers the NFIP, and the 351 communities in Massachusetts. She explained how the NFIP requirements are implemented through various state and local regulations in Massachusetts. She noted that Massachusetts does not mandate that every community participate in the NFIP. As a result, 10 of 351 communities do not participate. She reviewed the number of active policies and the percentages of policies (82%) and property (83%) located in coastal communities. She explained that some properties are prone to repetitive losses, defined by FEMA as "any insurable building for which two or more

claims of more than \$1,000 were paid by the NFIP within any 10-year rolling period since 1978.” She reviewed statistics on repetitive-loss properties and structures in Massachusetts, highlighting the top ten communities with repetitive-loss structures. In the top-ten group, the number of such structures ranges from 47 in three communities to 554 in Scituate. She noted that repetitive-loss structures are found throughout the Commonwealth.

Duperault reviewed updates to the FEMA flood insurance rate maps, noting that FEMA updated all coastal maps in the last ten to twelve years. For the maps of central and western Massachusetts, FEMA’s focus has been to “clean up” old paper maps using updated LIDAR and other data. She explained that the flood maps reflect past, not future, conditions and do not consider the impacts of stormwater. Congress had asked FEMA to report on what it would look like to consider future conditions in FEMA flood maps. The report concluded that, if future conditions were considered in flood maps, coastal flood plains would expand by 55 percent, nationwide, and riverine flood plains would expand by 45 percent.

Duperault cited a study by the Metropolitan Area Planning Council, which showed that 90% of properties damaged in a 2010 storm were mapped as being located outside of a flood zone on the FEMA map. Massachusetts and some other states are developing related map products. She showed an example from the Sea Level Rise and Coastal Flooding Viewer, a computerized mapping tool developed by the Massachusetts Office of Coastal Zone Management (available at <http://resilientma.org>).

Duperault discussed flood insurance inadequacies in Massachusetts, noting that more than \$32.5 billion dollars’ worth of coastal property in Massachusetts may not be covered for flood damages. She added that communities that are not well insured do not recover from a disaster quickly. Rao added that the impacts of flooding extend beyond structural damages to include economic and social disruptions such as loss of businesses and employment and closure of schools.

Cambareri asked about the status of property buy-back programs in Massachusetts. Duperault responded that costs can be prohibitive because the government has to offer fair market value of a property before the flood. [*Ed. note:* there have been very limited “buy-backs” over time through the federal grant programs administered by the Massachusetts Emergency Management Agency.] Woods asked about the viability of the NFIP. Duperault noted that a great percentage of flood insurance policies are subsidized. She explained that the NFIP expires every five years, and reforms are being proposed to make pricing of policies more fair. She added that past efforts to reform the program have faced resistance.

Rao then summarized a report, prepared in response to a request from FEMA, on how state entities are complying with the NFIP and its standards. The report provided an overview of the state’s efforts at managing development in state-owned and state-managed properties in Special Flood Hazard Areas. Rao explained that the state meets NFIP requirements through the state building code and other state regulations. Oversight of state projects is generally provided by a limited number of agencies, including the Department of Capital Asset Management and Maintenance (DCAMM) and the Department of Transportation, and an overview of projects occurs at the Massachusetts Environmental Policy Act Office. Monitoring of compliance is the responsibility of such state agencies as the Board of Building Regulations and Standards, the

Office of Coastal Zone Management, MassDEP, and other state agencies that issue permits and licenses. Rao offered to send a copy of the report to those who are interested.

In response to questions, Duperault added that the purpose of the report was to assess how the state manages development in state-built and -managed properties in flood hazard areas and describe how the state complies with FEMA guidelines. Woods asked if the state has done an assessment of its properties vulnerable to flooding and requested clarification on how the state insures its properties. Rao and Duperault explained that insuring all state properties would be prohibitively expensive and the state is essentially self-insured. Rao added that any large project will have to go through the MEPA review process.

Meeting adjourned, 2:57 p.m.

Documents or Exhibits Used at Meeting:

1. WRC Meeting Minutes: September 12, 2019
2. FY2019 WRC Annual Report (available at <https://www.mass.gov/doc/wrc-annual-report-fiscal-year-2019/download>)
3. Interbasin Transfer Act project status report, December 19, 2019
4. Hydrologic Conditions in Massachusetts, December 2019 (available at <https://www.mass.gov/water-data-tracking>)
5. MGL Chap. 21, Sections 8B – 8D (Interbasin Transfer Act)
6. Presentation by WRC staff: Burlington's Proposal to Join the TWRA under the Interbasin Transfer Act: Request for Additional Information
7. Presentation by Joy Duperault, DCR: The National Flood Insurance Program in Massachusetts: DCR's Flood Hazard management Program

Compiled by: mjm

Agendas, minutes, and other documents are available on the web site of the Water Resources Commission at <https://www.mass.gov/water-resources-commission-meetings>. All other meeting documents are available by request to WRC staff at 251 Causeway Street, 8th floor, Boston, MA 02114.